

The new GCSE mathematics examinations

Findings from the monitoring of the new GCSE mathematics specifications in 2008



March 2009
OFQUAL/09/4152

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Executive summary

In 2008, Ofqual monitored the new specifications in GCSE mathematics offered by the three England-based unitary awarding bodies – the Assessment and Qualifications Alliance (AQA), Edexcel, and Oxford, Cambridge and RSA Examinations (OCR).

A key area of Ofqual's monitoring is the scrutiny of question papers and associated mark schemes. Across all three awarding bodies, Ofqual found that, on the whole, question papers were clear, well-written and accessible to candidates, and had good-quality mark schemes.

However, Ofqual requires awarding bodies to address a small number of issues relating to question papers and mark schemes. Some question papers did not provide sufficient opportunities for candidates to demonstrate skills required by the assessment objectives, while others did not address specification content appropriately. There are also some concerns regarding the targeting of questions to grades.

Another important area of monitoring is the observation of meetings held by the awarding bodies, to ensure that these were conducted in accordance with the *GCSE, GCE and AEA code of practice*. Across all three awarding bodies, Ofqual found that the meetings observed were led by experienced examiners and awarding body staff who managed the process well. They were also conducted largely in accordance with the code of practice, and examples of good practice were observed.

Ofqual found that awarding bodies provided examining centres with good guidance and support for the new mathematics specifications before and during the examination period.

Ofqual has required awarding bodies to agree appropriate action plans to address the issues raised by its monitoring. Ofqual will monitor the implementation of the action plans in future examinations.

Introduction

Ofqual is the regulator of qualifications, examinations and tests in England. Its work ensures that children, young people and adult learners get the results their work deserves, that standards are maintained and that the qualifications learners receive count now and in the future.

The awarding bodies that offer GCSE and GCE exams operate within a clear regulatory framework, which is set out in the following documents:

- *The statutory regulation of external qualifications in England, Wales and Northern Ireland* (2004) (QCA/04/1293, [www.ofqual.gov.uk/files/6944_regulatory_criteria_04\(1\).pdf](http://www.ofqual.gov.uk/files/6944_regulatory_criteria_04(1).pdf))
- *GCSE, GCE and AEA code of practice* (April 2008) (QCA/08/3563, www.ofqual.gov.uk/files/Code_of_practice_April_2008.pdf).

Ofqual carries out a programme of monitoring activities each year to assess the performance of awarding bodies against the requirements of each section of the code of practice. One of these activities is the scrutiny programme – an in-depth study of the examination process across a range of specifications offered by the different awarding bodies each year. Each scrutiny involves a team of subject expert consultants, who observe awarding body meetings, analyse question papers, mark schemes and internal assessments, and review a sample of candidates' work. Each scrutiny results in a report on how the awarding body should improve its provision.

The scrutiny of a qualification aims to:

- determine whether the required qualification criteria and associated codes of practice have been met
- determine whether the assessments were fair and effective in measuring achievement by candidates in respect of the stated assessment objectives
- determine whether the procedures designed to ensure consistency of practice and comparability of standards were implemented effectively
- identify any aspects of the specification that appear to have constrained fair and effective examinations
- identify any good practice worthy of encouragement and dissemination, to promote continuing improvement in the quality of examinations.

Monitoring the new specifications

The revised criteria for the new specifications are provided in Appendix A.

For each of the specifications, the criteria specify a range of subject content that requires the candidate to demonstrate their skills, knowledge and understanding in the following assessment objectives (AOs):

- AO1 Using and applying mathematics
- AO2 Number and algebra
- AO3 Shape, space and measures
- AO4 Handling data.

Ofqual scrutinised the following three GCSE mathematics specifications:

- Edexcel mathematics A (linear) (2540).
- AQA mathematics B (modular) (4302)
- OCR mathematics C (graduated assessment) (J516)

Ofqual concentrated its scrutiny on written examinations only, as future GCSE mathematics specifications will not include coursework.

The linear specification has examinations and coursework at the end of the course. The modular specification has examinations both during and at the end of the course as well as coursework. The graduated assessment specification comprises 10 module tests targeted at specific grades, of which candidates take at least two during the course, as well as coursework and an examination at the end of the course.

The government inquiry publication *Making mathematics count* focused on the importance of all students being able to build on their existing knowledge, skills and understanding in mathematics to achieve the highest possible grade and have a more positive attitude towards mathematics and how mathematics can be used as an everyday tool relevant to students' lives.

The previous three-tier model of GCSE mathematics specifications (foundation, intermediate and higher) therefore changed to a two-tier model (foundation and higher). This two-tier model brought mathematics into line with English and science and provided an opportunity for all students to achieve a grade C regardless of their tier of entry, should their work deserve it, as the foundation tier covered grades C to G and the higher tier covered grades C to A*.

Schemes of assessment, question papers and mark schemes

More detail about each scheme of assessment has been provided both in this section and in Appendix B.

Generally, across all three awarding bodies the question papers were well-written, used clear language and covered the specification content at both the foundation and higher tiers.

Similarly, the mark schemes were judged as generally clear and promoting consistent and accurate marking of candidates' work.

AQA

Candidates taking GCSE mathematics B at either foundation or higher tier take five modules; each module addresses an assessment objective contained in the specification. In practice, candidates take four written papers and complete two pieces of coursework. Coursework can be marked by the teacher and then externally moderated by the awarding body or sent by the teacher to be marked by the awarding body. The written papers carry 80 per cent of the total marks.

From its review of question papers and mark schemes, Ofqual found that the high level of structuring in questions made it difficult for candidates to achieve the marks allocated to multi-step questions and AO1 (using and applying mathematics). For the module 3 papers, there were instances where multi-step marks were allocated to highly structured questions, while marks allocated to AO1 tended to address only the reasoning strand of using and applying mathematics. In the scripts reviewed, candidates for the module 1 papers were unable to answer the AO1 questions requiring explanations, and these were judged to be poor discriminators. For the module 5 papers, AO1 was better targeted in paper 1 than in paper 2. In the module 5 higher tier paper, some questions were judged less demanding than indicated by the awarding body and, by contrast, in the foundation tier paper, some questions were judged more demanding than indicated. Similarly, two questions from the module 1 foundation tier paper targeted by the awarding body at grade E were judged more demanding. In the scripts reviewed, candidates on the C/D boundary performed poorly on these questions. Finally, there was an example of one question on the module 1 higher tier paper that was outside the specification content and, as noted in the chief examiner's report, proved to be beyond all but the most able candidates, with only 9 per cent of those candidates gaining even one mark.

Edexcel

Candidates taking GCSE mathematics A at either foundation or higher tier take two written papers (papers 1 and 2 or papers 3 and 4, respectively). These two papers

carry 80 per cent of the total marks. In addition, candidates take a coursework unit worth 20 per cent of the marks available, which can be either marked by the teacher and then moderated by the awarding body or sent to be marked by the awarding body.

Overall, there was good use of common questions across both the foundation and higher tier papers to help ensure a degree of comparability between the tiers at grades C and D. However, while each paper contained a large number of short questions that provided a wide coverage of the specification content, it limited the opportunities for candidates to demonstrate the more strategic skills of reasoning and problem-solving. It was also noted that there were few opportunities across the papers for candidates to demonstrate skills relating to assessment objective one (using and applying mathematics). More generally, however, other assessment objectives were appropriately covered.

OCR

GCSE mathematics C uses graduated assessment comprising 10 module tests that are graduated in content and difficulty, and targeted at a specific grade or grades. All candidates sit papers for at least two of the ten modules, of which the best two count towards an aggregated score. They are externally assessed and are together worth 30 per cent of the total marks. Additionally, at either foundation or higher tier, each candidate sits a final paper (known as the terminal paper), which is also externally assessed and is worth 50 per cent of the total marks. There is also coursework, worth a further 20 per cent, that can be either marked by teachers and moderated by the awarding body or sent to be marked by the awarding body.

While generally there was good coverage of the whole specification across question papers, there were instances where almost identical questions appeared in both the terminal papers and some module papers. In addition, the content of some questions in a given module test was judged to have been more closely related to the content of the adjacent modules.

Not all questions were within the specification content. For instance, a question in one of the module tests required a greater display of knowledge and application by candidates than the specification suggested.

Actions

Ofqual requires each awarding body to address the issues identified in its review of the 2008 question papers relating to coverage of the specification content and assessment objectives.

Awarding body meetings

All three awarding bodies operate within a regulatory framework. GCSE specifications are governed by the *GCSE, GCE and AEA code of practice*, which is reviewed every year and was last updated in April 2008. To check compliance with this code, Ofqual observed a sample of the following types of meetings held by awarding bodies:

- question paper evaluation committee (QPEC) meetings – meetings to finalise draft question papers and mark schemes
- examiner standardisation meetings – meetings to discuss the application of the mark scheme and to produce a final version that allows all examiners to mark consistently and to the same standard
- awarding meetings – meetings to determine unit grade boundaries and grade outcomes for the specification as a whole by considering candidates' work and supporting statistical evidence.

Question paper evaluation committee meetings

The QPEC meetings observed were generally well prepared for and organised. All relevant examiners attended and consistently used their experience to deliberate on draft question papers and their mark schemes, as well as resolving any issues.

There were also examples of good practice. For instance, experts in special requirements provided valuable advice at the AQA meeting, such as considering whether numbers were accessible to Braille readers. At the Edexcel meeting a language adviser attended who made some useful contributions concerning the clarity of the wording of some question papers.

AQA used a tracking document throughout the QPEC meeting to record decisions and changes. However, by the end of the meeting discussions on one paper were incomplete, leaving the principal examiner to complete some questions and obtain the committee's agreement to them outside the meeting.

At the Edexcel QPEC meeting, it was noted that the targeting of questions at specific grades in the draft question papers was not consistent with the requirements of the GCSE mathematics criteria. In each draft paper 55 per cent of the marks were targeted at the lowest two grades, instead of 50 per cent as required by the criteria.

Examiner standardisation meetings

The marking of papers by all three awarding bodies took place using their respective online marking process. As part of this, all awarding bodies held face-to-face standardisation meetings involving examiner team leaders and principal examiners. A

number of meetings were observed and found, generally, to be well managed with experienced participants who were professional and consistent in their approach. By the end of the meetings all participants had a common understanding of how to apply the marking scheme. In addition, comprehensive guidance – including a standardisation handbook for examiners – was available, outlining the online marking process and the checks in place to ensure a high level of accuracy among examiners.

At all the meetings observed, participants had provisionally marked a selection of candidates' work in advance, which was useful when working through the mark schemes. There was a focus on key marking issues, and changes were made to the mark schemes to make them easier for all examiners to apply consistently. At the Edexcel meeting, examiners discussed key issues, including the allocation of marks to partially correct solutions and the selection of practice material to ensure that examiners mark consistently throughout the marking period.

Following one OCR team leader standardisation meeting, some members of the team stayed on to select scripts to monitor the performance of examiners' marking during the marking period. During this additional meeting, further changes were made to the mark scheme as the selection of questions led to discussion. There was concern that because not all examiners were present, not everyone had gained a common understanding of the final mark scheme.

Awarding meetings

The awarding meetings observed at all three awarding bodies were well organised and managed by the respective chair of examiners. Others present included the chief examiner, principal examiners, the awarding body officer and technical support staff. All were experienced and consistently used their professional judgement, together with supporting evidence, when considering candidates' work and setting unit grade boundaries. Where necessary, the range of candidates' work under consideration was extended to enable the awarding committee to reach agreement. Generally, each awarding body reviewed the boundaries across all its GCSE mathematics specifications to ensure comparability of standards.

The consideration of candidates' work for the award of the OCR specification took place online. This involved awarders reviewing candidates' work online at home and submitting their judgement electronically to the awarding body. The chair of examiners and chief examiners then met at the awarding body offices to consider these judgements, as well as other supporting evidence, to make grade boundary recommendations. Ofqual observed this process and judged that it was managed effectively.

Actions

Ofqual requires Edexcel to ensure that the targeting of questions at specific grades in draft question papers is consistent with the requirements of the GCSE mathematics criteria.

Ofqual requires OCR to ensure that all examiners are able to gain a common understanding of how to apply mark schemes.

Grading standards

Ofqual has no major concerns about grading standards for the three specifications covered by this report.

At the F/G boundary, the performance of candidates at all awarding bodies was judged to be in line with expectations. This was also the case at the C/D and A/B boundaries for the Edexcel and OCR specifications.

For Edexcel, candidates' performance at the higher tier C/D grade boundary was appropriate on both papers. At the foundation tier, C/D boundary candidates' performance was also as expected. Candidates demonstrated a solid performance on questions targeted at the lower grades, as well as a fair degree of competence in the more demanding questions.

OCR candidates produced good-quality answers to a significant number of questions across all modules at both tiers. In the module tests, candidates at the C/D boundary typically scored just over half of the available grade C marks, as well as a number of grade B marks.

The performance of AQA's candidates was judged appropriate at the higher tier C/D boundary. There was some evidence that candidates' performance at the A/B and foundation tier C/D grade boundaries may have been limited by the question papers. Although the papers were well written and covered most of the specification content, it proved difficult for these candidates to achieve the marks allocated to some multi-step questions and to show evidence of assessment objective one (AO1 – using and applying mathematics). In one of the papers, coverage of AO4 (handling data) was also limited, as questions focused largely on one element of AO4 – namely, processing and representing data – with other elements under-assessed.

Further work

Below is a summary of recommendations made by Ofqual to the awarding bodies in relation to question papers and mark schemes, and awarding body meetings.

- Ofqual requires each awarding body to address the issues identified in its review of the 2008 question papers relating to coverage of the specification content and assessment objectives.
- Ofqual requires Edexcel to ensure that the targeting of questions at specific grades in draft question papers is consistent with the requirements of the GCSE mathematics criteria.
- Ofqual requires OCR to ensure that all examiners are able to gain a common understanding of how to apply mark schemes.

Ofqual has required awarding bodies to agree appropriate action plans to address the issues raised by its monitoring. Ofqual will monitor the implementation of the action plans in future examinations.

Appendix A : GCSE criteria for mathematics

1 INTRODUCTION

- 1.1 These criteria define the subject-specific essentials for GCSE specifications in mathematics. Specifications must also meet the requirements of the appropriate national curriculum order for mathematics and the regulatory authorities' general requirements, including the Common and GCSE criteria.
- 1.2 A specification that meets the mathematics requirements of the appropriate national curriculum order must use the title Mathematics.
- 1.3 Any specification, which contains significant elements of the subject mathematics, must be consistent with the relevant parts of these criteria.

2 AIMS

- 2.1 The aims of all specifications must be consistent with national curriculum requirements.

3 SPECIFICATION CONTENT

- 3.1 A specification must address the programmes of study from the relevant national curriculum orders for England and/or Wales and the statutory requirements for key stage 4 in Northern Ireland.
- 3.2 A specification entitled Mathematics must specify, for each tier, the content on which assessment will be based.

4 KEY SKILLS

- 4.1 GCSE specifications in mathematics should provide opportunities for developing and generating evidence for assessing the key skills listed below. Where appropriate, these opportunities should be directly cross-referenced at specified level(s) to the criteria listed in Part B of the Key Skills specifications.
 - application of number
 - communication
 - improving own learning and performance
 - information and communication technology

- problem solving
- working with others

5 ASSESSMENT OBJECTIVES

- 5.1 A specification must require candidates to demonstrate their knowledge, understanding and skills in the following assessment objectives. These relate to the knowledge, skills and understanding in the relevant programme of study.

AO1 Using and applying mathematics
 AO2 Number and algebra
 AO3 Shape, space and measures
 AO4 Handling data

- 5.2 Assessment objective AO1 must be assessed in contexts provided by the other assessment objectives.

6 SCHEMES OF ASSESSMENT AND ASSESSMENT COMPONENTS

- 6.1 The weightings for the assessment objectives given in 5 are:

AO1 10% external and 10% internal assessment;

AO2 40% external

AO3 20% external

AO4 10% external and 10% internal assessment;

The total marks across question papers by tier must ensure the assessment objectives AO2, AO3 and AO4 are balanced in the ratio 4:2:1 respectively. At least 12.5% of these marks must additionally assess AO1.

The division of credit between number and algebra in each tier must match the division in the relevant programme of study [Foundation (3:2), Higher (2:3)]. In the external assessment, manipulative algebra must be given a minimum weighting of 6% (Foundation tier) and 25% (Higher tier)

- 6.2 Each scheme of assessment must include a terminal examination with a weighting of 80% in end of course assessment schemes and a minimum weighting of 50% in staged assessment schemes.
- 6.3 The weighting allocated to internal assessment must be 20% in any scheme of assessment. Internal assessment must involve a project assessing AO4 and at least one activity assessing AO1 in the context of AO2 or AO3.
- 6.4 Each scheme of assessment must include external assessment with a weighting of 40% in which candidates may not use a calculator, and external assessment with a weighting of 40% in which candidates are required to demonstrate effective use of a calculator.
- 6.5 Examination papers must include a sufficient proportion of marks for questions demanding the unprompted solution of multi-step problems [Foundation (6%-10%), Higher (10%-12.5%)]
- 6.6 Each scheme of assessment must have two tiers of assessment: a Foundation tier awarding grades G-C and a Higher tier awarding grades D-A*.
- 6.7 Examination papers must offer an appropriate balance of marks focused on the grades available in the tier. In each tier 50% of the marks must be focused on the lowest two grades. 25-30% of the marks in each tier must be focused on the top two grades.

The content of the Higher tier subsumes the content of the Foundation tier. Some marks at any grade must be awarded for questions or parts of questions assessing easier material in a more challenging way.

7 GRADE DESCRIPTIONS

- 7.1 Grade descriptions are provided to give a general indication of the standards of achievement likely to have been shown by candidates awarded particular grades. The descriptions must be interpreted in relation to the content in the specification; they are not designed to define that content. The grade awarded will depend in practice upon the extent to which the candidate has met the assessment objectives overall. Shortcomings in some aspects of candidates' performance in the assessment may be balanced by better performance in others.

7.2 Grade F

In order to carry through tasks and solve mathematical problems, candidates identify and obtain necessary information; they check their results, considering whether these are sensible. Candidates show understanding of situations by describing them mathematically using symbols, words and diagrams. They draw simple conclusions of their own and give an explanation of their reasoning.

Candidates use their understanding of place value to multiply and divide whole numbers and decimals by 10, 100 and 1000. They order, add and subtract negative numbers in context. They use all four operations with decimals to two places. They reduce a fraction to its simplest form by cancelling common factors and solve simple problems involving ratio and direct proportion. They calculate fractional or percentage parts of quantities and measurements, using a calculator where necessary. Candidates understand and use an appropriate non-calculator method for solving problems involving multiplying and dividing any three-digit by any two-digit number. In solving problems with or without a calculator, candidates check the reasonableness of their results by reference to their knowledge of the context or to the size of the numbers, by applying inverse operations or by estimating using approximations. Candidates explore and describe number patterns and relationships including multiple, factor and square. They construct, express in symbolic form, and use simple formulae involving one or two operations.

When constructing models and when drawing, or using shapes, candidates measure and draw angles as accurately as practicable, and use language associated with angle. They know the angle sum of a triangle and that of angles at a point. They identify all the symmetries of 2-D shapes. They know the rough metric equivalents of imperial units still in daily use and convert one metric unit to another. They make sensible estimates of a range of measures in relation to everyday situations. Candidates calculate areas of rectangles. Candidates use co-ordinates in all four quadrants to locate and specify points.

Candidates understand and use the mean of discrete data. They compare two simple distributions using the range and one of the mode, median or mean. They interpret graphs and diagrams, including pie charts, and draw conclusions. They understand and use the probability scale from 0 to 1. Candidates make and justify estimates of probability by selecting and using a method based on equally likely outcomes or on experimental evidence as appropriate. They understand that different outcomes may result from repeating an experiment.

7.3 Grade C

Starting from problems or contexts that have been presented to them, candidates refine or extend the mathematics used to generate fuller solutions. They give a reason for their choice of mathematical presentation, explaining features they have selected. Candidates justify their generalisations, arguments or solutions, showing some insight into the mathematical structure of the problem. They appreciate the difference between mathematical explanation and experimental evidence.

In making estimates candidates use appropriate techniques and multiply and divide mentally. They solve numerical problems involving multiplication and division with numbers of any size using a calculator efficiently and appropriately. They understand the effects of multiplying and dividing by numbers between 0 and 1. They use ratios in appropriate situations. They understand and use proportional changes. Candidates find and describe in symbols the next term or the n th term of a sequence, where the rule is linear. Candidates calculate one quantity as a percentage of another. They multiply two expressions of the form $(x + n)$; they simplify the corresponding quadratic expressions. They solve simple polynomial equations by trial and improvement and represent inequalities using a number line. They formulate and solve linear equations with whole number coefficients. They manipulate simple algebraic formulae, equations and expressions. Candidates draw and use graphs of quadratic functions.

Candidates solve problems using angle and symmetry properties of polygons and properties of intersecting and parallel lines. They understand and apply Pythagoras' theorem when solving problems in two-dimensions. Candidates solve problems involving areas and circumferences of circles. They calculate lengths, areas and volumes in plane shapes and right prisms. Candidates enlarge shapes by a positive whole number or fractional scale factor. They appreciate the imprecision of measurement and recognise that a measurement given to the nearest whole number may be inaccurate by up to one half in either direction. They understand and use compound measures such as speed. Candidates use mathematical instruments to carry out accurate constructions of loci

Candidates construct and interpret frequency diagrams with grouped data. They specify hypotheses and test them. They determine the modal class and estimate the mean, median and range of a set of grouped data, selecting the statistic most appropriate to their line of enquiry. They use measures of average and range with associated frequency polygons, as appropriate, to compare distributions and make inferences. Candidates understand relative

frequency as an estimate of probability and use this to compare outcomes of experiments.

7.4 Grade A

Candidates give reasons for the choices they make when investigating within mathematics itself or when using mathematics to analyse tasks: these reasons explain why particular lines of enquiry or procedures are followed and others rejected. Candidates apply the mathematics they know in familiar and unfamiliar contexts. Candidates use mathematical language and symbols effectively in presenting a convincing reasoned argument. Their reports include mathematical justifications, explaining their solutions to problems involving a number of features or variables.

Candidates manipulate simple surds. They determine the bounds of intervals. Candidates understand and use direct and inverse proportion. They manipulate algebraic formulae, equations and expressions, finding common factors and multiplying two linear expressions. In simplifying algebraic expressions, they use rules of indices for negative and fractional values. They solve problems using intersections and gradients of graphs.

Candidates sketch the graphs of sine, cosine and tangent functions for any angle and generate and interpret graphs based on these functions. Candidates use sine, cosine and tangent of angles of any size, and Pythagoras' theorem when solving problems in two and three dimensions. They use the conditions for congruent triangles in formal geometric proofs. They calculate lengths of circular arcs and areas of sectors, and calculate the surface area of cylinders and volumes of cones and spheres. They understand and use the effect of enlargement on areas and volumes of shapes and solids

Candidates interpret and construct histograms. They understand how different methods of sampling and different sample sizes may affect the reliability of conclusions drawn; they select and justify a sample and method, to investigate a population. They recognise when and how to work with probabilities associated with independent and mutually exclusive events.

Appendix B : Schemes of assessment

AQA GCSE Mathematics B (4302)

Module		Weighting	Type of assessment
1	Written paper – Foundation tier (calculator & non-calculator)	11%	Externally assessed
	Written paper – Higher tier (calculator & non-calculator)	11%	Externally assessed
2	Coursework 1 (AO4 task) – Option T	10%	Internally assessed and externally moderated
	Coursework 1 (AO4 task) – Option X	10%	Externally assessed
3	Written paper – Foundation tier (calculator & non-calculator)	19%	Externally assessed
	Written paper – Higher tier (calculator & non-calculator)	19%	Externally assessed
4	Coursework 2 (AO1 task) – Option T	10%	Internally assessed and externally moderated
	Coursework 2 (AO1 task) – Option X	10%	Externally assessed
5	Terminal papers 1 & 2 – Foundation tier (calculator & non-calculator)	50%	Externally assessed
	Terminal papers 1 & 2 – Higher tier (calculator & non-calculator)	50%	Externally assessed

Candidates take modules 1 to 5. For each module, they must take one of the two assessment options.

Edexcel GCSE Mathematics A (2540)

Component		Weighting	Type of assessment
1	Paper 1 (5540F/1F)	40%	Externally assessed written paper
2	Paper 2 (5540F/2F)	40%	Externally assessed written

Component		Weighting	Type of assessment
			paper
3	Paper 3 (5540H/3H)	40%	Externally assessed written paper
4	Paper 4 (5540H/4H)	40%	Externally assessed written paper
5	Coursework paper 7A (5507_7A)	20%	Internally assessed coursework
6	Coursework paper 7B (5507_7B)	20%	Externally assessed coursework

Candidates take either papers 1 and 2 for a foundation tier award or papers 3 and 4 for a higher tier award. Additionally, candidates at both tiers must take one of the two coursework options.

OCR GCSE Mathematics C (J516)

Unit	Weighting	Type of assessment
B241-B250 (Module tests 1–10)	30%	Externally assessed
B251 (Terminal paper – Foundation tier)	50%	Externally assessed
B252 (Terminal paper – Higher tier)	50%	Externally assessed
B253 (Coursework A – centre marked)	20%	Internally assessed and externally moderated
B254 (Coursework B – OCR marked)	20%	Externally assessed

Candidates take at least two of module tests 1 to 10. Additionally, candidates take the terminal paper at either foundation or higher tier, and one of the two coursework options.

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First published by The Office of the Qualifications and Examinations Regulator in 2009.

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